28th Congress, 2d Session. | Doc. No. 28. | Ho. of Reps. War Dept.

ROADS IN IOWA.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING

A copy of the report of the agent charged with the construction and repair of certain roads in the Territory of Iowa.

January 2, 1845.
Read, and laid upon the table.

War Department, *December* 31, 1844.

Sir: In answer to the resolution of the House of Representatives of the 26th instant, requiring the Secretary of War "to communicate to the House a copy of the report of Captain T. J. Cram of the survey of the harbor of Dubuque, in the Territory of Iowa; also the report of the officer having charge of the construction and improvement of certain roads in the Territory of Iowa," I transmit, herewith, a report of the colonel of the corps of topographical engineers. It will be seen by the report of Colonel Abert that the survey of the harbor of Dubuque has not yet been received; this will be made the subject of a further communication from this department.

Very respectfully, your obedient servant,

WM. WILKINS,
Secretary of War.

Hon. John W. Jones,
Speaker of the House of Representatives.

Bureau of Topographical Engineers,
Washington, December 30, 1844.

Sir: I have the honor to transmit, herewith, a copy of the report of the agent charged with the construction and repair of certain roads in the Territory of Iowa, as directed by the resolution of the House of Representatives of the 26th instant.

The report upon the survey of the harbor at the town of Dubuque, Iowa, has not yet been received. When received, a copy of it will be transmitted in obedience to your instructions.

Very respectfully, sir, your obedient servant,

J. J. ABERT,
Colonel corps Top. Engs.

Hon. W. Wilkins,
Secretary of War.

DUBUQUE, *November* 21, 1844.

SIR: I have the honor to enclose, herewith, estimates for bridges on the military and agency roads, agreeably to your orders of the 2d instant.

In preparing these estimates, I have been governed by the best information I was enabled to obtain on my reconnoissance, respecting the quality and proximity of timber and stone to the several points where bridges were required.

The most suitable timber that can be procured for the purpose is white oak. There is no pine of any description to be obtained in this region, other than that brought down the Mississippi on rafts; and the expense of hauling would so augment the cost, as to preclude the possibility of using it. The estimates are consequently made on the supposition that oak will be used for the superstructure, and that the masonry shall be of the best dry rubble work that can be built of the stone in the vicinity of the respective bridges.

From the tenor of my instructions, I am induced to believe that the bureau presupposes that bridges have been built over the various streams on the routes, and that repairs are necessary.

On the agency road, the only vestiges which remain are the abutments of the bridge which was built over Mud creek, the stone of which only can be availed of in its reconstruction, as the span is not adequate, and the abutments should consequently occupy different positions.

In making a reconnoissance of this route, I did not presume it was contemplated by the bureau to construct a bridge on Skunk river; I therefore made no very particular inquiries or examination relative thereto. But, from the information I obtained respecting the bridge over Mud creek, and a cursory glance at the river, I am induced to believe the estimate I have made will approximate very nearly to the amount required.

Supposing that the route now travelled on the agency road coincides with that traced in 1839, I do not consider it necessary to alter materially the site of any bridge, except that on Little Cedar, where, as I have before stated, the route of the road has been abandoned, and a shorter and better route substituted.

As far as I could learn, there is no trace of the agency road left, from a point about two miles east of Little Cedar to the Des Moines, except what exists in the memory of a few individuals occasionally, but rarely, to be met with. Since the survey was made by Mr. Tilghman, the country has been in parts improved, land has been taken up, farms located and fenced in, and the inhabitants have substituted roads which appear better to answer their purposes than that located in the first instance. Beyond the Little Cedar there are no streams which could not be crossed without bridges; or, if bridges are required, in case the road should ever be made use of, they can be constructed with a few logs.

The Little Cedar is often impassable for weeks at a time, in consequence of the depth and rapidity of the current in freshets, and the inhabitants from remote sections of the country are as often detained there during such periods. A bridge, therefore, is very important at this place, and can be made in connexion with the agency road, by a slight deflection, commencing at a point about two miles east of the river, where the traces of the road are obliterated, and thence following the more direct road to Washington, crossing the Little Cedar at a suitable point, about half a mile north of the point crossed by the first trace.

In making my examination of these roads, my time was necessarily so limited, in consequence of arrangements made with Captain Cram for co-operation in the examination of the harbor of Dubuque, that I was constrained to confine myself to the collection of such information as would enable me to make an *approximate* estimate of the cost of each bridge, and its *probable* location. And it has been my intention to offer the bridges for contract per foot run for the superstructure, and by the perch for the masonry; so that, in the event of its being found necessary (for reasons which may appear on more minute examination) to alter slightly either the positions or lengths of the bridges, the same may be done without interfering with the meaning and intention of the contract.

I have not heretofore considered it of sufficient importance to submit these slight alterations for the consideration of the bureau, presuming that latitude would necessarily be given to the agent, particularly in the unsettled districts of country where the alterations could not conflict with the interests of individuals.

On the military road there are three rivers, which, from their magnitude, I did not conceive could come within the limit of the appropriation, viz: Red Cedar, Iowa, and Skunk. A suitable bridge over either of these streams would cost from $6,000 to $8,000; and in case drawbridges should be required (as in all probability they would be) over Red Cedar and Iowa, the amount would be much greater. Red Cedar and Iowa I examined particularly; but, as there was no trace of the road in the vicinity of Skunk river, I passed over it on a more convenient route towards the town of Washington. I have no doubt, however, that the estimate I have furnished will be found adequate, if a proper point is selected.

The only bridges which remain of those constructed by Mr. Tilghman on this road, are those over the south fork of Catfish, Prairie, and White Water creeks, and two of those in a very imperfect state. Of the bridge over the Wapsipinicon, there is not a stone left; the abutments and pier are entirely swept away, not leaving a trace even of their position.

The alterations which I would suggest on this route will occur at the south fork of the Maquoketah, the Wapsipinicon, the Iowa, and English rivers; and at the numerous creeks it may be found expedient to vary in some instances a few yards from the exact point over which the survey passed, though I do not apprehend any great difficulty in adapting the position of bridges to the route.

At the south fork of the Maquoketah, the river is crossed by the road below the mouth of Varmly (or Varoel's) creek, where the banks are low; and the approach to the bridge, on the right bank particularly, would be over a flat piece of land of considerable extent, liable to inundation from the river, and often covered with water to the depth of five or six feet, and sometimes much more. The road, after passing over this flat land, crosses Varoel's creek, within half a mile of the river, where a bridge would also be necessary, as the one placed there by Mr. Tilghman has been carried away. To obviate, in a great degree, these difficulties, I would place the bridge above the mouth of Varoel's creek—say about 120 yards above the point where the road now crosses. The banks there are much higher, and the road and bridge can, with very little expense, be made secure from freshets.

At the Wapsipinicon, the road now crosses at a bend of the river, where the turn is abrupt, and where the drift ice, in a freshet, would accumulate against the abutment on the left bank, so as to endanger the superstructure, if not the abutment itself. The abutment on the right bank was placed just

at the apex of the point formed by the bend in the river. This point is formed of a light alluvial sandy deposite, over which the water in freshets flows for some extent from the bridge. A channel is being formed between the point and the highland, and a repetition of such freshets as occurred last season will cut the point entirely off.

Between three and four hundred yards below this point, there is a very favorable site for a bridge, where the bank on the right is high, rocky, and firm, the course of the river straight, and the approach to a bridge on either side would be safe and favorable.

At the Iowa, the road approaches the river over a low flat piece of land on the left bank, and crosses it at a bend obliquely, which would make the bridge some sixty or seventy feet longer than there is a necessity for. A much more favorable point presents itself where the ferry is now established, about one-fourth of a mile above, from which there is a territorial road in connexion with the military road, on both sides of the river. This road, I believe, is at all times preferred to the military road; and a bridge established at this point would be of much greater convenience to the seat of government and the Territory at large.

The route of the military road at English river passes over a flat bottom land for some extent, subject to inundations at all seasons, and rendering an approach to the river extremely difficult. At the time I made my examination, I was obliged to cross the river nearly three miles above the site of the military road, in consequence of a slight freshet, and found great difficulty in crossing there.

The military road is not generally travelled in the vicinity of the river, and has been abandoned in consequence of the difficulties which always occur when the water is high. From the best information I could obtain on the subject, I am satisfied that a bridge could only with great expense be made to stand, and then could be made use of but partially.

A bridge could be constructed in connexion with this route, about a mile and three-fourths above the crossing of the military road, where a territorial road has been laid out, intersecting the military road on the left bank of the river; and on the right bank, a connexion may be formed within a mile of the river, by crossing an open and nearly level prairie. By this deviation, I am of opinion the road would pass on better ground, and the route would not be lengthened.

In making my estimates for the bridges, I have been governed by the prices of materials and labor, making also a liberal allowance for profit to the contractor, and am satisfied the work ought to be executed for the amounts estimated.

It has been my intention to invite proposals for the construction of bridges over every stream upon the routes, and then make a selection of such as I conceive most important, keeping the expenditure within the limits of the appropriation.

There are many deep (and at some seasons of the year) almost impassable sloughs between the Maquoketah and Iowa city, the improvement of which is almost of as much importance as bridging the rivers, and a small amount of the appropriation could be very advantageously expended on them.

I am, with much esteem, your obedient servant,

JOSHUA BARNEY,
United States Agent.

Col. J. J. ABERT,
Bureau of Topographical Engineers, Washington.

Estimate for bridges on the military road.

Bridges estimated for.	Amount.	Total.
No. 1. North fork of Catfish creek—bridge 40 feet long:		
Abutments and grading - -	$150 00	
Superstructure - - -	400 00	
Total cost -	–	$550 00
No. 2. North fork of Maquoketah river—bridge 96 feet long:		
Abutments and grading - -	175 00	
Superstructure - - -	1,152 00	
Total cost -	–	1,327 00
No. 3. South fork of Maquoketah river—bridge 120 feet long:		
Abutments and grading - -	450 00	
Superstructure - - -	1,446 00	
Total cost -	–	1,896 00
No. 4. Kitty's creek—bridge 20 feet long:		
Abutments and grading - -	100 00	
Superstructure - - -	50 00	
Total cost -	–	150 00
No. 5. Fawn creek—bridge 20 feet long:		
Abutments and grading - -	100 00	
Superstructure - - -	50 00	
Total cost -	–	150 00
No. 6. Wapsipinicon river—bridge 136 feet long:		
Abutments and grading - -	400 00	
Superstructure - - -	1,632 00	
Total cost -	–	2,032 00
No. 7. Cedar river—bridge 450 feet long:		
Abutments, piers, and grading -	2,100 00	
Superstructure, with draw - -	7,300 00	
Total cost -	–	9,400 00

Estimate for bridges on the military road—Continued.

Bridges estimated for.	Amount.	Total.
No. 8. Iowa river—bridge 400 feet long:		
Abutments, piers, and grading -	$1,800 00	
Superstructure, with draw - -	6,600 00	
Total cost -	–	$8,400 00
No. 9. English river—bridge 110 feet long:		
Abutments and grading - -	350 00	
Superstructure - - -	1,320 00	
Total cost -	–	1,670 00
No. 10. Davis's creek—bridge 40 feet long:		
Abutments and grading - -	175 00	
Superstructure - - -	250 00	
Total cost -	–	425 00
No. 11. North branch of Long creek—bridge 50 feet long:		
Abutments and grading - -	180 00	
Superstructure - - -	450 00	
Total cost -	–	630 00
No. 12. Goose creek—bridge 30 feet long:		
Abutments and grading - -	100 00	
Superstructure - - -	150 00	
Total cost -	–	250 00
No. 13. Crooked creek—bridge 45 feet long:		
Abutments and grading - -	200 00	
Superstructure - - -	350 00	
Total cost -	–	550 00
No. 14. Little creek—bridge 70 feet long, to be built with 2 spans:		
Abutments and grading - -	350 00	
Superstructure - - -	300 00	
Total cost -	–	650 00

Estimate for bridges on the military road—Continued.

Bridges estimated for.	Amount.	Total.
No. 15. Big creek—bridge 100 feet long, to be built with 2 spans:		
Abutments, pier, and grading -	$200 00	
Superstructure - - -	800 00	
Total cost -	–	$1,000 00
No. 16. Skunk river—bridge 380 feet long:		
Abutments, piers, and grading -	1,500 00	
Superstructure - - -	5,320 00	
Total cost -	–	6,820 00
No. 17. Little Cedar creek—bridge 50 feet long:		
Abutments and grading - -	175 00	
Superstructure - - -	450 00	
Total cost -	–	625 00
For numerous smaller streams and sloughs -	–	1,000 00
Aggregate cost for bridging -	–	37,525 00

JOSHUA BARNEY,
United States Agent.

Estimate for bridges on the agency road.

Bridges estimated for.	Amount.	Total.
No. 1. Hockeye creek—bridge 40 feet long:		
Abutments and grading - -	$200 00	
Superstructure - - -	450 00	
Total cost -	–	$650 00
No. 2. Long creek—bridge 35 feet long:		
Abutments and grading - -	175 00	
Superstructure - - -	200 00	
Total cost -	–	375 00

Estimate for bridges on the agency road—Continued.

Bridges estimated for.	Amount.	Total.
No. 3. Cedar creek—bridge 40 feet long:		
Abutments and grading - -	$200 00	
Superstructure - - -	400 00	
Total cost -	–	$600 00
No 4. Mud creek—bridge 60 feet long:		
Abutments and grading - -	200 00	
Superstructure - - -	720 00	
Total cost -	–	920 00
No. 5. Prairie creek—bridge 50 feet long:		
Abutments and grading - -	250 00	
Superstructure - - -	600 00	
Total cost -	–	850 00
No. 6. Williamson's creek—bridge 20 feet long:		
Abutments and grading - -	100 00	
Superstructure - - -	50 00	
Total cost -	–	150 00
No. 7. Little Cedar creek—bridge 60 feet long:		
Abutments and grading - -	250 00	
Superstructure - - -	720 00	
Total cost -	–	970 00
No. 8. Skunk river—bridge 375 feet long:		
Abutments, piers, and grading -	1,450 00	
Superstructure - - -	5,250 00	
Total cost -	–	6,700 00
Between Hockeye and Long creeks, there are eight small streams which require bridging—average cost about $50 - - -	400 00	
Between Long and Cedar creeks, three small streams—average cost about $50 - -	150 00	
Between Mud creek and Skunk river, three small streams—average cost about $50 - -	150 00	
		700 00
Aggregate cost of bridging -	–	11,915 00

JOSHUA BARNEY, *U. S. Agent.*